

CLAIMS

1. Multilayer washable material which comprises at least one layer of a textile material, the layers being joined to one another by means of an adhesive composition, characterized in that in the interfacial region between each pair of layers bearing against one another there is an adhesive composition in the form of a pattern which prevents wrinkling, and no finishing of the multilayer material, as such and/or of a smaller part obtained therefrom, is carried out.

2. Multilayer material according to claim 1, characterized in that the pattern in which the adhesive composition is present is selected from:

- a) a dot lining pattern,
 - b) separately positioned pattern parts which are separated by regions where there is no adhesive composition,
 - c) a number of pattern parts (4, 22) which are identical in shape and one or more pattern parts (21) of a different shape,
 - d) the patterns described under b) and/or c), with one or more pattern parts being formed from a dot lining pattern,
 - e) a dot lining pattern as described under a) in which there are parts without any dots,
- and combinations of the patterns described under a) to e).

3. Multilayer material according to one or more of claims 1-2, characterized in that the multilayer material is a washable underpad comprising a moisture-permeable top layer material (2); a moisture-impermeable bottom layer material (3) and a moisture-absorption element (1) positioned between them.

4. Multilayer assembly according to claim 2-3, characterized in that a pattern part of a different shape is a border (21), the external dimensions of which correspond to the dimensions of the use product, such as a washable underpad which it is desired to form from the multilayer material by dividing up the latter.

5. Multilayer material according to one or more of claims 1-4,

characterized in that the adhesive composition is selected from solidified, nonreactive thermoplastic material and a fully moisture-cured reactive hotmelt adhesive.

5 6. Multilayer material according to claim 5, characterized in that the adhesive composition is a fully moisture-cured reactive polyurethane hotmelt adhesive.

10 7. Multilayer material according to one of more of the preceding claims 3-6, characterized in that it comprises one or more additional layers of material selected from an anti-allergy layer, a resilient foam layer, a dispersion layer, an anti-bedsores layer and an anti-odour layer, which are bonded to the moisture-absorption element (1) and the top layer material (2)
15 or the bottom layer material (3).

20 8. Method for producing a multilayer washable material which comprises at least one layer of a textile material, at least comprising a top layer material (2), a bottom layer material (3) and an interlayer material (1) positioned between them, wherein a top layer material (2), a bottom layer material (3) and an interlayer material (1) are provided and are joined to one another using an adhesive composition, characterized in that an adhesive composition is applied in the form of a pattern which
25 prevents wrinkling both in the interfacial region which is to be formed between top layer material (2) and interlayer material (1) and in the interfacial region which is to be formed between bottom layer material (3) and interlayer material (1), and the layers are brought to bear against one another and are joined to
30 one another as the adhesive composition sets, with no finishing of the multilayer material as such and/or a smaller part which is cut from it, being carried out.

35 9. Method according to claim 8, characterized in that the adhesive composition is selected from a nonreactive thermoplastic material which is solid under ambient conditions and a moisture-curable plastic material, and it is applied in the form of a melt at a temperature which is higher than the melting point of the plastic material used.

10. Method according to claim 9, characterized in that a moisture-curable plastic material is applied to the top layer material (2) and the bottom layer material (3).

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11. Method according to claim 10, characterized in that the molten moisture-curable plastic material is applied with the aid of screen printing, with at least the stencil used being heated to above the melting point of the moisture-curable plastic material used.

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12. Method according to claim 11, characterized in that the screen printing used is rotary screen printing using one or more seamless cylindrical metal stencils (5, 6).

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13. Method according to one or more of the preceding claims, characterized in that the moisture-curable plastic material used is a plastic material selected from a reactive polyurethane hotmelt adhesive and a reactive polyalkene hotmelt adhesive.

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14. Method according to claim 13, characterized in that a reactive polyurethane hotmelt adhesive is used.

15. Method according to one or more of the preceding claims, characterized in that to form a multilayer material in the form of a washable underpad with the aid of rotary screen printing, a pattern of a moisture-curable plastic material is applied to a moisture-permeable top layer material (2) and to a moisture-impermeable bottom layer material (3), and the materials which have been coated in this way are combined with a moisture-absorption element (1) in such a manner that the sides of the top layer material (2) and the bottom layer material (3) which comprise moisture-curable plastic material bear against the two surfaces of the moisture-absorption element (1), and curing of the moisture-curable plastic material bonds together the top layer material (2), bottom layer material (3) and the moisture-absorption element.

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16. Method according to Claim 15, characterized in that the top

layer material (2) and the bottom layer material (3) are in web form, and moisture-curable plastic material (7, 9) is applied to both materials simultaneously with the aid of two rotary screen-printing stencils (5, 6), and the top layer and bottom layer materials which have been coated in this way are brought to bear against a moisture-absorption element in web form, after which moisture-curing of the moisture-curable plastic material bonds together the top layer material (2), bottom layer material (3), and moisture-absorption element (1).

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17. Method according to Claim 16, characterized in that it is carried out continuously, and after an assembly of top layer material (2), bottom layer material (3) and moisture-absorption element (1) in web form has been formed, the web is divided into separate, washable underpads by cutting, and these underpads are used without finishing.

18. Method according to one or more of the preceding claims, characterized in that to fully cure the moisture-curable plastic, moisture is supplied in an amount sufficient to enable the moisture-curable plastic on the top layer material (2) and bottom layer material (3) to cure fully.

19. Method according to one or more of claims 8-18, characterized in that the pattern in which the adhesive composition is applied is selected from:

- a) a dot lining pattern,
 - b) separately positioned pattern parts which are separated by regions where there is no adhesive composition,
 - 30 c) a number of pattern parts (4, 22) which are identical in shape and one or more pattern parts (21) of a different shape,
 - d) the patterns described under b) and/or c), with one or more pattern parts being formed from a dot lining pattern,
 - 35 e) a dot lining pattern as described under a) in which there are parts without any dots,
- and combinations of the patterns described under a) to e).

20. Method according to claim 19, characterized in that the

pattern on the top layer material (2) and the bottom layer material (3) extends over the entire surface thereof and comprises dots, or the pattern parts (4, 21, 22) are composed of dots.

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21. Method according to one or more of claims 15-20, characterized in that one or more additional layers of material selected from an anti-allergy layer, a resilient foam layer, a dispersion layer, a bedsores-inhibiting layer and an anti-odour layer are applied and these layers are bonded to the absorption element (1) and the top layer material (2) or the bottom layer material (3).

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